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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/070,006		Gilbert Wolrich	10559-302US1	5728	
7590 01/20/2004			EXAMI	EXAMINER <sub>.</sub>	
Scott C Harris			PEIKARI, BEHZAD		
Fish & Richardson 4350 La Jolla Village Drive Suite 500			ART UNIT	PAPER NUMBER	
			2186		
San Diego, CA 92122			DATE MAILED: 01/20/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

8

	Application No.	Applicant(s)				
Office Action Comments	10/070,006	WOLRICH, GILBERT				
Office Action Summary	Examiner	Art Unit				
The MAN INC DATE of this communication and	B. James Peikari	2186				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period v Failure to reply within the set or extended period for reply will, by statute - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status	May ramph and 2002					
1) Responsive to communication(s) filed on <u>20 №</u> 2a) This action is <b>FINAL</b> . 2b) Th	is action is non-final.					
2a) ☐ This action is <b>FINAL</b> . 2b) ☐ Th  3) ☐ Since this application is in condition for allowa		rosecution as to the merits is				
closed in accordance with the practice under  Disposition of Claims						
4)⊠ Claim(s) 1,4-8 and 11-25 is/are pending in the application.						
4a) Of the above claim(s) <u>21-25</u> is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1, 4-8 and 11-20</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) 21-25 are subject to restriction and/or	election requirement.					
Application Papers						
9) The specification is objected to by the Examine	·					
10) The drawing(s) filed on 28 February 2002 is/are		-				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.  12) The oath or declaration is objected to by the Examiner.						
	arriller.					
Priority under 35 U.S.C. §§ 119 and 120		) ( D				
13) Acknowledgment is made of a claim for foreign	n priority under 35 U.S.C. § 119(a	1)-(a) or (t).				
a)⊠ All b)□ Some * c)□ None of:						
1. Certified copies of the priority document						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.						
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
a) The translation of the foreign language pro	• •					
Attachment(s)	, , ,					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal	y (PTO-413) Paper No(s) Patent Application (PTO-152)				

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### **DETAILED ACTION**

#### Election/Restrictions

1. Newly submitted claims 21-25 directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: they include a number of hardware components that are not required by claims 1-20, such as a plurality of microengines, a control store, *separate* logic for (a) controller logic, (b) context event switching logic and (c) arithmetic logic (in an ALU), an execution box data path, a general purpose register set, etc.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 21-25 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

### **Drawings**

2. The informal drawings filed in this application are acceptable for examination purposes. When the application is allowed, applicant will be required to submit new formal drawings.

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# Specification

3. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

## Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1, 4-8 and 11-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The claims recite "in a single cycle, concatenating ..., shifting..., and storing," or similar language" (note the claims and page 1 of applicant's remarks submitted with the amendment of September 17, 2003). However, the specification does not support such a feature of the claims. For example, the "concatenating ..., shifting..., and storing" is described on page 10, lines 15 et seq. of the specification, but there is no mention of these occurring in a single cycle.

In fact, the only mention of "a single cycle" occurs on page 8, lines 14-22, of the specification. However, only the step of "a single cycle shift of one operand or two operands" is disclosed as occurring in a single cycle. The steps of "concatenating" and

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"storing" are not mentioned in this section. There is no disclosure that the steps of "concatenating" and "storing" occur in a single cycle, much less that all three steps occur in the same single cycle.

6. Claims 1, 4-8 and 11-14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claims 1 and 8 recite "storing the shifted 64-bit intermediate result in third 32-bit word", however the specification does not support this limitation, nor does it explain how it is possible to fit 64 bits of data into a 32 bit space.

### Response to Amendment

7. With regard to the remarks submitted with the amendment filed November 20, 2003, these cite page 8, lines 14-16. However, as stated in the rejection, this section only teaches a single cycle shift of one operand or two operands in a single cycle. This does *not* teach "concatenating" or "storing".

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#### Conclusion

8. Applicant's amendment necessitated the additional rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Peikari whose telephone number is (703) 305-3824. The examiner is generally available between 11:00 am and 9:30 pm, EST, Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Kim, can be reached at (703) 305-3821.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

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Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 746-7239 (Official communications)

or:

(703) 746-7240 (for Informal or Draft communications)

or:

(703) 746-7238 (for After-Final communications)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

B. James Peikari Primary Examiner Art Unit 2186

1/18/04